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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,041	03/04/1999	DAVID GEORGE HALLEY	FA/153A	7973

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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/155,041

Applicant(s)

HALLEY ET AL.

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11-17, 19-21, 23-26, 28, 29 and 59-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-17, 19-21, 23-26, 28, 29 and 59-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 20, 2004 has been entered.

Response to Amendment

2. The Amendment submitted on February 20, 2003, has been entered. Claims 8 – 10, 22, 27, and 58 have been cancelled. Claims 1 and 28 have been amended and claims 62 – 69 have been added. Therefore, the pending claims are 1 – 7, 11 – 17, 19 – 21, 23 – 26, 28, 29, and 59 – 69.

3. The rejections to claims 8 – 10, 22, 27, and 58 are moot due to the cancellation of those claims.

4. The rejections based on JP 62-233237 are withdrawn for the reasons set forth in the advisory action.

5. The 35 USC 102 and 35 USC 102/103 rejections based on JP 64-45195 is withdrawn since JP 64-45195 fails to teach the elastic modulus of the dot material, the height of the dot, and that the composite has an abrasion resistance which is four times greater than the abrasion resistance of the substrate without the polymeric dots.

6. The 35 USC 102 and 35 USC 102/103 rejections based on JP 3-56541 is withdrawn since JP 3-56541 fails to teach the elastic modulus of the dot material, the height of the dot, and that

Art Unit: 1771

the composite has an abrasion resistance which is four times greater than the abrasion resistance of the substrate without the polymeric dots.

7. The 35 USC 103 rejection based on JP 5-33335 in view of JP 64-45195 is withdrawn since the rejection fails to teach using a polymeric dot with a height between 10 and 20 microns.

However, a new rejection based on JP 5-3335 is set forth below.

Claim Objections

8. Claim 59 is objected to because of the following informalities: claim 59 depends on cancelled claim 58. For purposes of examination, claim 59 will be examined as if it depends on claim 1 since cancelled claim 58 depended on cancelled claim 27 which ultimately depended on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 62 and 64 – 67 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 64-45195.

JP 64-45195 discloses moisture-permeable waterproof fabric comprising a layer of dots, lines, or a combination of lines and dots made from a polymeric resin coated on the face of a moisture-permeable waterproof resin film (page 4, 3rd paragraph). The waterproof, breathable film is polyurethane resin or a polytetrafluoroethylene porous film (page 2, last paragraph). The waterproof, breathable film is bonded to a fabric layer on the side opposite the layer of dots (page 2, 2nd paragraph). The dots can be made from various moisture-permeable resins including polyurethane, polyamino urethane, polytetrafluoroethylene or the like (page 5, 2nd paragraph).

Art Unit: 1771

The dots can be applied in various patterns and as various shapes such as round-shaped, square-shaped and star-shaped shown in Figures 1 – 3 (page 6, 3rd paragraph). The coated dots shouldn't cover more than 50% of the surface area of waterproof, breathable film (page 7, 1st paragraph). The fabric is used to make moisture-permeable waterproof fabric for sports-related clothing (page 2, last paragraph).

Although JP 64-45195 does not explicitly teach the limitations of abrasion resistance, and elastic modulus, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polyurethane dots and a moisture-permeable, waterproof coated fabric) and in the similar production steps (i.e. coating the fabric with the polymeric polyurethane dots) used to produce the breathable, waterproof composite. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by JP 64-45195. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 62 and 64 – 67 are rejected.

11. Claims 62 and 64 – 67 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 3-56541.

JP 3-56541 discloses that known waterproof, moisture permeable fabrics include urethane polymers, polyacrylates ester resin, or tetrafluoroethylene resin coated onto a fabric base (page 3, 3rd paragraph). JP 3-56541 teaches adding a discontinuous coating layer to the microporous film layer in the shape of dots (page 4, 2nd paragraph). The dots are made from a polymer material which is moisture permeable such as polyurethane (page 5, 2nd paragraph). The shape

Art Unit: 1771

and configuration of the dots are not particularly restricted (page 5, last paragraph). The ratio of the dot regions to the total area of the regions where no dots are applied is preferably 1:1 to 4:1 (page 6, 1st paragraph). Finally, the dots have a size ranging from 0.01 to 10 mm² (page 5, last paragraph). Thus, the round dots would have a diameter, or maximum dimension, of 0.1 mm to 3.5 mm, or 100 microns to 3500 microns.

Although JP 3-56541 does not explicitly teach the limitations of elastic modulus and abrasion resistance, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a waterproof, breathable composite fabric and polymeric dots) and in the similar production steps (i.e. applying the polymeric dots to the breathable film layer of the composite material) used to produce the breathable, waterproof fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitation would obviously have been provided by the process disclosed by JP 3-56541. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 62 and 64 – 67 are rejected.

Claim Rejections - 35 USC § 103

12. Claims 1 – 7, 11 – 17, 19, 24 – 26, 28, 29, 59, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-45195.

The features of JP 64-45195 have been set forth above. While JP 64-45195 discloses that a discontinuous layer can be coated onto a waterproof, breathable film, JP 64-45195 fails to teach the specific size and configuration of the discontinuous dots applied to the surface. However, JP 64-45195 does suggest that the size, shape and configurations can be modified to

Art Unit: 1771

form various patterns. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to chose the claimed height, maximum dimension, and dot spacing claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill of the art would be motivated to space and size the dots so that the dots will be uniformly spaced on the surface of the waterproof film, without covering too much of the film so that the fabric is no longer breathable or flexible. Thus, claims 1 – 7, 11 – 17, 19, 26, 28, 29, 59 and 63 are rejected.

Additionally, although JP 64-45195 does not explicitly teach the limitations of water resistance and water vapor permeability, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polyurethane dots and a moisture-permeable, waterproof coated fabric) and in the similar production steps (i.e. coating the fabric with the polymeric polyurethane dots) used to produce the breathable, waterproof composite. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitations would obviously have been provided by the process disclosed by JP 64-45195. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 24 and 25 are rejected.

13. Claims 1 – 7, 11 – 17, 19, 24 – 26, 28, 29, 59, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-56541.

The features of JP 3-56541 have been set forth above. While JP 3-56541 discloses that a discontinuous layer can be coated onto a waterproof, breathable film, JP 3-56541 fails to teach

Art Unit: 1771

the specific size and configuration of the discontinuous dots applied to the surface. However, JP 3-56541 does suggest that the size, shape and configurations can be modified to form various patterns. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to chose the claimed height, maximum dimension, and dot spacing claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). One of ordinary skill of the art would be motivated to space and size the dots so that the dots will be uniformly spaced on the surface of the waterproof film, without covering too much of the film so that the fabric is no longer breathable or flexible. Thus, claims 1 – 7, 11 – 17, 19, 26, 28, 29, 59 and 63 are rejected.

Additionally, although JP 3-56541 does not explicitly teach the limitations of water resistance and water vapor permeability, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. a waterproof, breathable composite fabric and polymeric dots) and in the similar production steps (i.e. applying the polymeric dots to the breathable film layer of the composite material) used to produce the breathable, waterproof fabric. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed limitation would obviously have been provided by the process disclosed by JP 3-56541. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Therefore, claims 24 and 25 are rejected.

Art Unit: 1771

14. Claims 1 – 7, 11 – 17, 19, 24 – 26, 28, 29, 59, and 62 – 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-33335 in view of JP 64-45195.

The features of JP 5-33335 and JP 64-45195 have been set forth in section 12 of the Final Rejection mailed July 3, 2003. While JP 5-33335 discloses that the size of the polymeric dots can vary, JP 5-33335 fails to teach that the polymeric dots of the have a height of 10 to 20 microns. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to chose the claimed height, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Further, such a modification would have involved a mere change in the shape of a components. A change in the shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 357 F.2nd 669, 149 USPQ 47 (CCPA 1966). One of ordinary skill of the art would be motivated to modify the height of the dots so that the dots will provide sufficient space between the fabric and the wearer to keep the wearer comfortable and dry while using as little material as possible to produce the polymeric dots. Therefore, claims 1 – 7, 11 – 17, 19, 24 – 26, 28, 29, 59, and 62 – 67 are rejected.

15. Claims 20, 21, 68 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-45195 in view of Burleigh (4,613,544).

Claims 20, 21, 23, 68, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-56541 in view of Burleigh.

The features of JP 64-45195 and JP 3-56541 have been set forth above. Both references disclose that polytetrafluoroethylene can be used as the waterproof coating on the fabric layer,

Art Unit: 1771

however these references fail to teach that the polytetrafluoroethylene includes a hydrophilic coating. Burleigh is drawn to waterproof, moisture-vapor permeable sheet material. Burleigh discloses that various waterproof materials are known which allow water to pass through the fabric or aren't breathable including polyurethane and polytetrafluoroethylene (column 1, lines 13 – 35). Burleigh discloses a layer comprising a hydrophobic microporous film wherein the pores are filled with a hydrophilic material produces waterproof fabric which is also very moisture-vapor permeable (column 2, lines 10 – 38). The composite material has improved hand or drape and durability (column 2, lines 7 – 9). The microporous material is expanded polytetrafluoroethylene (column 4, lines 44 – 49). The hydrophilic material which fills the pores is made from polyurethane (column 5, lines 55 – 67). The composite forms a layer which has a continuous non-porous surface. Hence, the hydrophilic material will be on the surface of the composite layer. Thus, it would have been obvious to one of ordinary skill in the art to substitute the waterproof composite layer taught by Burleigh for the polytetrafluoroethylene layer taught by JP 64-45195 or JP 3-45195 since Burleigh discloses that the material is very breathable while have excellent drape and durability.

16. Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 64-45195 or JP 3-56541 in view of Siniscalchi (4,775,581).

Claims 60 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-33335 and JP 64-45195 as applied to claim 29 above, and further in view of Siniscalchi.

The features of JP 64-45195, JP 3-56541, and JP 5-33335 have been set forth above. While, these references disclose that various garments can be made from the waterproof fabrics, these references fail to teach how the seams are produced. Siniscalchi is drawn to garments

Art Unit: 1771

made from waterproof fabrics. Siniscalchi discloses that while fabrics are sewn together via stitching, the stitches produce areas where water can infiltrate into the fabric in waterproof garments (column 1, lines 15 – 20). Therefore, Siniscalchi teaches adding a waterproof tape to the areas of the fabrics which have been stitched to prevent water from passing through into the interior of the fabric (column 3, lines 5 – 14). The tape also produces increased strength at the seams (column 1, lines 40 – 43). Therefore, it would have been obvious to one of ordinary skill in the art to form seams as taught by Siniscalchi in the garments produced from the composite fabrics taught by JP 62-233237, JP 64-45195, JP 3-56541, or JP 5-33335 since the seams would have increased strength and be watertight. Thus claims 60 and 61 are rejected.

Response to Arguments

17. Applicant's arguments filed February 20, 2004 have been fully considered but they are not persuasive. The applicant argues that the prior art fails to teach the claimed elastic modulus, dot height, and abrasion resistance. With respect to the claimed dot height the rejections set forth above address this newly claimed limitation. And while the prior art fails to teach the elastic modulus and abrasion resistance property of the polymeric material applied to the composite fabric, as set forth in the previous Office Actions and set forth above in the present rejection, it is felt that these properties are inherent to the prior art since the prior art uses similar materials and structural limitations. Further, it has been held that as long as there is evidence of record establishing inherency, failure of those skilled in the art to contemporaneously recognize an inherent property, function or ingredient of a prior art reference does not preclude a finding of anticipation. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1349, 51 USPQ2d 1943, 1948 (Fed. Cir. 1999). Further, it is noted that when the PTO shows a sound basis for believing that

Art Unit: 1771

the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Thus, the burden has shifted to the Applicant to provide evidence that the properties are not inherent in the prior art materials. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Arguments of counsel cannot take the place of evidence. *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Therefore, the rejections are maintained.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo
March 31, 2004



CHERYL A. JUSKA
PRIMARY EXAMINER